

REMARKS

Claims 1-13, 27-39 and 122-141 presently appear in this case. No claims have yet been examined on the merits. All of the claims have been subjected to restriction and election requirements. Reconsideration and withdrawal of the restriction and election requirements, to the extent indicated below, and examination of all of the claims remaining in the case are respectfully urged.

The examiner indicates that this application contains groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1 and requires election of a single invention from the following groups:

Group 1, claim(s) 1-26 (each in part), drawn to a method of treating a plaque forming disease comprising the steps of displaying polypeptide on a display vehicle, said polypeptide representing at least one epitope of an aggregating protein associated with plaque formation and said display vehicle wherein said display vehicle is a **virus**;

Group 2, claim(s) 1-5, 12-18, 25, and 26 (each in part), drawn to a method of treating a plaque forming disease comprising the steps of displaying polypeptide on a display vehicle, said polypeptide representing at least one epitope of an aggregating protein associated with plaque formation and

said display vehicle wherein said display vehicle is a **bacteria**;

Group 3, claim(s) 1-5, 12-18, 25, and 26 (each in part), drawn to a method of treating a plaque forming disease comprising the steps of displaying polypeptide on a display vehicle, said polypeptide representing at least one epitope of an aggregating protein associated with plaque formation and said display vehicle wherein said display vehicle is a **polypeptide carrier**;

Group 4, claim(s) 27-39 (each in part), drawn to a pharmaceutical composition for treating a plaque forming disease comprising an effective amount of a display vehicle displaying a polypeptide wherein said display vehicle is a **virus**;

Group 5, claim(s) 27-31, 38, and 39 (each in part), drawn to a pharmaceutical composition for treating a plaque forming disease comprising an effective amount of a display vehicle displaying a polypeptide wherein said display vehicle is a **bacteria**;

Group 6, claim(s) 27-31, 38 and 39 (each in part), drawn to a pharmaceutical composition for treating a plaque forming disease comprising an effective amount of a display vehicle displaying a polypeptide wherein said display vehicle is a **polypeptide carrier**;

Group 7, claim(s) 40-52 (each in part), drawn to a method of preparing a display vehicle for treating a plaque

forming disease, the method comprising the step of genetically modifying a genome of a display vehicle by inserting therein a polynucleotide sequence wherein said display vehicle is a **virus**;

Group 8, claim(s) 40-44, 51, and 52 (each in part), drawn to a method of preparing a display vehicle for treating a plaque forming disease, the method comprising the step of genetically modifying a genome of a display vehicle by inserting therein a polynucleotide sequence wherein said display vehicle is a **bacteria**;

Group 9, claim(s) 53-66 (each in part), drawn to a method of treating a plaque forming disease comprising the steps of displaying polypeptide on a display vehicle, said polypeptide representing at least an immunological portion of an antibody said display vehicle wherein said display vehicle is a **virus**;

Group 10, claim(s) 53-59 and 66 (each in part), drawn to a method of treating a plaque forming disease comprising the steps of displaying polypeptide on a display vehicle, said polypeptide representing at least an immunological portion of an antibody said display vehicle wherein said display vehicle is a **bacteria**;

Group 11, claim(s) 53-59 and 66 (each in part), drawn to a method of treating a plaque forming disease comprising the steps of displaying polypeptide on a display vehicle, said polypeptide representing at least an

immunological portion of an antibody said display vehicle  
wherein said display vehicle is a **polypeptide carrier**;

Group 12, claim(s) 67-79 (each in part), drawn to an  
agent for treating a plaque forming disease comprising a  
display vehicle displaying a polypeptide representing at least  
an immunological portion of an antibody wherein said agent is  
a **virus**;

Group 13, claim(s) 67-72 and 79 (each in part),  
drawn to an agent for treating a plaque forming disease  
comprising a display vehicle displaying a polypeptide  
representing at least an immunological portion of an antibody  
wherein said agent is a **bacteria**;

Group 14, claim(s) 67-72 and 79 (each in part),  
drawn to an agent for treating a plaque forming disease  
comprising a display vehicle displaying a polypeptide  
representing at least an immunological portion of an antibody  
wherein said agent is a **polypeptide carrier**;

Group 15, claim(s) 80-91 (each in part), drawn to a  
pharmaceutical composition for treating a plaque forming  
disease comprising an effective amount of a display vehicle  
displaying a polypeptide representing at least an  
immunological portion of an antibody wherein said display  
vehicle is a **virus**;

Group 16, claim(s) 80-84 and 91 (each in part),  
drawn to a pharmaceutical composition for treating a plaque

forming disease comprising an effective amount of a display vehicle displaying

a polypeptide representing at least an immunological portion of an antibody wherein said display vehicle is a **bacteria**;

Group 17, claim(s) 80-84 and 91 (each in part), drawn to a pharmaceutical composition for treating a plaque forming disease comprising an effective amount of a display vehicle displaying a polypeptide representing at least an immunological portion of an antibody wherein said display vehicle is a **polypeptide carrier**;

Group 18, claim(s) 92-103 (each in part), drawn to a method of preparing a display vehicle for treating a plaque forming disease, the method comprising the step of genetically modifying a genome of a display vehicle by inserting therein a polynucleotide sequence wherein said display vehicle is a **virus**;

Group 19, claim(s) 92-96 and 103 (each in part), drawn to a method of preparing a display vehicle for treating a plaque forming disease, the method comprising the step of genetically modifying a genome of a display vehicle by inserting therein a polynucleotide sequence wherein said display vehicle is a **bacteria**;

Group 20, claim(s) 92-96 and 103 (each in part), drawn to a method of preparing a display vehicle for treating a plaque forming disease, the method comprising the step of genetically modifying a genome of a display vehicle by

inserting therein a polynucleotide sequence wherein said display vehicle is a **polypeptide carrier**;

Group 21, claim(s) 104-114 (each in part), drawn to a method of introducing a display vehicle lacking an engineered targeting moiety into a brain of a recipient wherein said display vehicle is a **virus**;

Group 22, claim(s) 104, 105, and 111-114 (each in part), drawn to a method of introducing display vehicle lacking an engineered targeting moiety into a brain of a recipient wherein said display vehicle is a **bacteria**;

Group 23, claim(s) 104, 105, and 111-114 (each in part), drawn to a method of introducing display vehicle lacking an engineered targeting moiety into a brain of a recipient wherein said display vehicle is a **polypeptide carrier**;

Group 24, claim(s) 115-117, drawn to a polypeptide comprising at least an immunological portion of an antibody; and

Group 25, claim(s) 118-121, drawn to a method of detecting a presence or an absence of a prion protein in a biological sample.

Applicants elect with traverse Group 4, claims 27-39 (each in part), drawn to a pharmaceutical composition for treating a plaque forming disease comprising an effective amount of a display vehicle displaying a polypeptide wherein said display vehicle is a virus. The requirement is traversed

insofar as Groups 1-3, 5 and 6 are concerned. The claims of non-elected Groups 7-25 have now been cancelled without prejudice to the filing of a divisional application thereon.

The composition claims of Group 4 have now been amended to specify that the pharmaceutical composition is in unit dosage form. This language distinguishes over the Frenkel reference cited by the examiner, as is evidenced by the issuance of patent 6,703,015, from one of the applications that is a parent of the present application. During the prosecution of the parent application that led to the '015 patent, a rejection over Frenkel was withdrawn when the claims were amended to insert "unit dosage form". Thus, all of Groups 4-6 should be recombined as they share the same special technical feature of a display vehicle displaying a polypeptide presenting at least one epitope of an aggregating protein associated with plaque formation. Frenkel does not anticipate this claim.

Claims 1-13 have now been amended to depend from elected claim 27. As these claims are now clearly drawn to methods of use of the elected pharmaceutical composition, they must be examined with the composition claims from which they depend in accordance with 37 C.F.R. §1.475. Furthermore, Groups 2 and 3 should also be examined with the elected group for the same reasons as discussed hereinabove with respect to the claims of Groups 5 and 6. Claims 14-26 have been deleted

without prejudice toward the continuation of prosecution thereof in a divisional application.

Accordingly, reconsideration and withdrawal of the requirement for restriction insofar as Groups 1-6 are concerned are respectfully urged.

The examiner has also required an election of a single species from the following species:

- a. Early onset Alzheimer's disease;
- b. Late onset Alzheimer's disease;
- c. Presymptomatic Alzheimer's disease;
- d. SAA amyloidosis;
- e. Hereditary Icelandic syndrome;
- f. Senility; and
- g. Multiple myeloma.

Applicants elect the species of b, late onset Alzheimer's disease, with traverse insofar as the species of early onset Alzheimer's disease, late onset Alzheimer's disease and presymptomatic Alzheimer's disease are concerned.

All three species are part of Alzheimer's disease. If applicants had merely recited the generic term Alzheimer's disease, examination would be conducted on Alzheimer's disease in general which would encompass all three species.

Accordingly, examination together of the species of Alzheimer's disease for prosecution on the merits is respectfully requested.

Claims 27, 28, 30-33, 35, 36, 38, 39, and new claims 122-127, 129, 131-137, 139, and 141 read on the species of late onset Alzheimer's disease as well as the other species of Alzheimer's disease (claims 128, 130, 138, and 140 are directed solely to the other species of Alzheimer's disease). Regarding Groups 1-3, for which rejoinder with the elected group is requested, claims 1, 2, 4-7, 9, 10, 12 and 13, read on the species of late onset Alzheimer's disease as well as the other species of Alzheimer's disease.

The requirement to elect a single species from:

- h. Scrapie;
- i. Bovine spongiform encephalopathy (BSE);
- j. Kuru;
- k. Creutzfeldt-Jacob Disease (CJD);
- l. Gerstmann-Streussler-Sheinker Disease (GSS); and
- m. Fatal familial insomnia (FFI)

is moot in view of the above election of Alzheimer's disease.

The examiner has also required election of a single species from among the following species:

- n. Beta-amyloid;
- o. Serum amyloid A;
- p. Cystatin C;
- q. IgG kappa light chain; and
- r. Prion protein.

Applicants elect n, beta-amyloid, consistent with the above election of Alzheimer's disease.

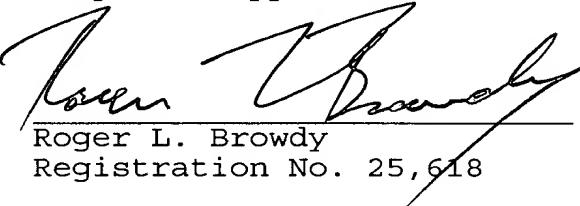
It has been noted that the official filing receipt does not recognize the applications for which benefit is claimed in the international application of which the present application is the national stage. Accordingly, attached hereto is an Application Data Sheet that clarifies the record in this regard.

Reconsideration and withdrawal of the restriction requirement, to the extent requested above and examination of Groups 1-6 as the claims relate to Alzheimer's disease and beta-amyloid are earnestly solicited.

Respectfully submitted,

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